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COLLECTIVE INTENTIONALITY: A HUMAN – NOT A MONKEY – BUSINESS

abstract

In Making the Social World Searle makes the same claim he made in 1995: that "Human beings along with a lot of other social animals, have the capacity for collective intentionality" (Searle 2010, 43). In this paper I aim to show that Searle's "overattribution" of collective intentionality to non-human animals is unjustified. Firstly, I briefly reconstruct and augment Tomasello & Rakoczy's (2007) criticism that Searle overemphasises the primitiveness of the notion of collective intentionality. Secondly, I will investigate the domain of cooperative behaviour by means of a comparative, cross-species methodology driven by an enactivist approach. Such an approach can help us to understand (i) why Searle overattributes collective intentionality, (ii) how we can resist such an overattribution, and (iii) why we ought to resist it. Thirdly, I argue that Searle's six conditions of adequacy for any account of collective intentionality are incompatible with his attribution of collective intentionality to non-human animals. Finally, I conclude by noting that Searle's overattribution has important consequences for his system, as it implicates that human uniqueness begins with institutional reality rather than with collective intentionality and social ontology.

keywords

Intentionality, social coordination, collaboration, human ontogeny

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1. Introduction

In the *Construction of Social Reality* John Searle claims that "many species of animals, our own especially, have a capacity for collective intentionality" (Searle 1995, 23). In *Making the Social World* Searle makes the same claim: that "Human beings along with a lot of other social animals, have the capacity for collective intentionality" (Searle 2010, 43). In this paper I aim to show that Searle's "overattribution" of collective intentionality to non-human animals is unjustified. My argument comprises four steps.

Firstly, I briefly reconstruct and augment Tomasello and Rakoczy's (2007) criticism that Searle overemphasises the primitiveness of the notion of collective intentionality, and that he does not show enough regard to the understanding of the cognitive and communicative resources that are demanded by individual behaviour in the context of cooperative engagements. Here a complementary account is presented, namely the distinction between competitive and collaborative cooperation as outlined by Brinck and Gärdenfors (2001).

Secondly, I will investigate the developmental roots of cooperation in social cognition, by means of a comparative, cross-species methodology driven by an enactivist approach. The basic claim of the enactivists is that our experiences are not inner events, rather that they result as the engagements between an organism and the surrounding environment. Therefore any experience includes aspects of the brain, the body and the environments of an organism, in a temporal and spatial extension (Hutto 2009). Given that interactions during ontogeny play an especially large and important role in the cognitive development of *Homo sapiens*, as compared with other primates (Tomasello 2011, 38), such an approach turns out to be very helpful within the debate on the nature of the notion of intentionality[1]. The enactivist paradigm has been similarly discussed by psychologists such as Tomasello himself (Seemann [Ed.] 2010), and that is the reason why its exploitation in this argumentation can help us to understand (i) why Searle overattributes collective intentionality, (ii) how we can resist such an overattribution, and (iii) why we ought to resist it.

Thirdly, after having recalled Searle's six conditions of adequacy for any account of collective intentionality (Searle 2010, 44-45), I argue that these

1 Thanks to Dan Hutto, who in a recent conversation inspiringly guided me through a deeper analysis of Searle's notion of intentionality and pointed my attention to its crucial implications for my investigations in social cognition.

conditions are incompatible with the attribution of collective intentionality to non-human animals, if we accept Tomasello and Rakoczy, Brinck and Gärdenfors and the enactivist's arguments. In particular I focus on Searle's third and sixth conditions. According to the third condition, intentionality - collective or individual - has to exist inside individuals" heads. The sixth condition says that in collective intentionality, there is the need to believe in sharing one's collective goal. I explain how these two conditions suggest that social coordination and collective intentionality should be identified. However, if we identify social coordination and collective intentionality then we are led to wrongly attribute collective intentionality also to non-human animals. Finally, I conclude by noting that Searle's overattribution has important consequences for his system, as it implicates that human uniqueness begins with institutional reality rather than with collective intentionality and social ontology.

2. The Ontogeny of Social Ontology-Revisited

Rakoczy and Tomasello (2007) have contributed to critically informing the necessary distinction between, on the one hand, social coordination, and, on the other hand, collective intentionality. They explain why the former can be traced in non-human animals" behaviour, meanwhile, the latter is arguably human-specific. In order to outline this distinction they provide empirical evidence from experimental research on child development, and the way infants engage in social activities at different stages of their growth. Rakoczy and Tomasello outline the distinction between these two very different kinds of behaviour in order to explain why Searle's claim that collective intentionality can be found not only in human reality, but also in non-human animals including our nearest primate relatives, is wrong. The analysis of the skills and motivations that constitute collective intentionality (according to Searle's six conditions of adequacy[2]) has enabled them to hypothesise about how, during the course of normal ontogeny[3], human children move from specific social interactions involving shared intentionality[4] (learning, sharing, informing, helping) to participation in institutional realities-involving scenarios. Arguably, Rakoczy and Tomasello's distinction between social coordination and collective intentionality can be furthered and informed by Brinck and Gärdenfors's (2001) notion of cooperation, which distinguishes between competitive cooperation and collaborative cooperation, the latter being characterised by those features that can be ascribed to Rakoczy and Tomasello's account on collective intentionality.

2 See section 3.

3 Meaning during the course of normal ontogeny (excluding cases of autistic and feral children) in which children engage in regular social activities with peers and adults too.

4 For a complete account on the notion of "shared intentionality", see Tomasello *et al.* (2005).

ANGELICA KAUFMANN *University of Antwerp*

The difference between competitive and collaborative cooperation can be introduced as follows: non-human primates coordinate individual goals into common actions (e.g. group hunting and coalitions against predator's aggressions). In the case of chimpanzees, as it has been remarked, "There is nothing that would be called collaboration in the narrow sense of joint intentions based on coordinated plans" (Rakoczy and Tomasello 2007, 116). This means that in order to talk about collaboration we need to identify the *joint intentions* that underpin a group activity. A joint intention is directed to a goal that will bring benefit to all the members of the group, independently from the fact that the single actor will get a personal and immediate reward. In fact the way in which chimpanzees work within a group is a competitive or agonistic interaction (Hare *et al*. 2000, 2001, 2004). In the case of, for instance, group hunting, the participation of single members is motivated by the awareness that "we are going to share the plunder" and this is going to happen *soon*. This, conversely, means that the motivation for which each single actor is taking part in a group activity, is driven by the desire to satisfy a personal need that will be rewarded immediately or in the near future. This kind of group activity is also called "coalition of alliances" that is a context in which single individuals act together in order to defend the group they belong to from the attack of other – in this specific case, chimpanzee's – groups. But what is happening in these interactions is just a coordinated execution of the same thing at the same time with responsiveness to one another's behaviour, that is the understanding of one another's *intentional* states (I shall return to this in a moment). On the other hand, human children, from very early in ontogeny, tend to engage in group activities (this is especially evident in the context of pretend play games where the mutual agreement to pretend to be someone else implies the predisposition to understand mutuality and trust) that are motivated by an interest in the achievement of a shared goal (Rakoczy 2006, Wyman and Tomasello 2007).

The second kind of cooperation, collaborative cooperation, occurs when the goal is not to compete for given resources. In this context, the reward may be prospective relatively to long-term planning. And the calculus of future values of goals demands cognitive tools that all non-human animals, including primates, seem to lack. Collaborative cooperation is human-unique (and, ostensibly, the same goes for collective intentionality) in that it requires the ability to attribute mental states and to understand mental states, which is something that non-human primates are unable to do. The difference might be that apes do not attribute *mental* states in order to interpret other's behaviour but they instead attribute only intentional

states. Generally, intentional states are considered to belong to a subcategory of mental states (Searle 1983). In my account, instead, intentional states are not included in mental states but are characterised by a different set of conditions. I suggest that holding *mental* states means being aware of the contents of one's own thoughts (and to a further level of sophistication, means to be aware to the contents of someone else's thoughts[5]). I am not implying that non-human animals cannot *be* in mental states but just that they cannot *be aware* of them – and therefore *share* them- as they cannot understand the content of their mental states (see Hutto 2009). And this constitutes a significative limitation in the diversification of collective action-planning. The reason why – being a human – I can understand my mental states is due to the fact that my mind represents the contents of my own thoughts in terms of propositional attitudes. And propositional attitudes have a linguistic form. But, as pointed out by Searle (1979), intentionality does not need to occur exclusively in the form of a linguistic act[6]. Therefore, I characterise *intentional* states as describing intentional actions. By "intentional" I mean driven by a purpose or goal-directed. But holding them does not, necessarily, imply the mastery of concepts like beliefs and desires (for which there is the need of far more complex forms of representations). And it can only work when the competition is directed to given resources (e.g. food, mate selection), which means on short-term planning. In this sense, my claim is that we should ascribe intentionality to all action-oriented and conscious behaviour, but we should not, given this assumption, jump to the conclusion that all living organisms act intentionally with the same degree of complexity, and we should not accept so easily Searle's claim that many social animals act *collectively* intentionally. As a result, the more an agent's communicative system is sophisticated the more the collaborative framework gets articulated in a wider range of possible scenarios. So, it is important to understand the crucial relevance of the fact that *Homo sapiens* adopted propositional attitudes and not just intentional attitudes. Because the former is what it takes to have the capacity for collective intentionality. I shall now enhance the last point by means of an enactivist story.

3. Going Enactive

As stated, it is arguable that propositional attitudes are generated by symbolic representations, namely taking the shape of linguistic communication (Bermùdez 2003, Davidson 1984, Hutto 2008). But what is the content of a symbolic representation? The first thing to point out is

5 See Tomasello *et al.* (2005) for an account on different orders of intentionality.
6 Unlike Searle (1979) I do not believe that intentional states consists of representative contents in the various psychological modes. In my account intentional states can exist without being represented linguistically.

that not all attitudes involve contents, but, following Hutto (2008) it can be argued that only propositional attitudes are content-involving, as opposite to intentional attitudes, that do not require propositional contents. In this account, it is necessary to be able to manipulate complex linguistic forms in order to articulate content-full propositional attitudes. This is because only language has the appropriate structures that enable to express those attitudes.

The content of symbolic representations is what its user wants to represent as *"standing for* something else" than what is perceptually experienced in the present context. This is a function that a signals-based communicative system – as those we find in non-human animals world – cannot exploit in that signals are never used to stand for something else than what is required in coordinating behaviour. From a cognitive point of view, it is a crucial step up to be able to think by means of "detached" representations (Gärdenfors 1996) because it is what it, cognitively, takes in order to act accordingly to goal-based rather than drive-based motivations (see, for instance, Sterelny 2003). Representations of mental states make use of propositions that are structured with recombinant elements. This is what allows voluntary planning, actical reasoning, and decision making. In fact this capacity requires the mastery of the tools provided by language. As a result, from the enactivist perspective, opositional-based beliefs and desires that characterise human's practical planning, are likely a quite late developmental achievement (Hutto 2008).

The likelihood of the claim that I just made is widely supported, for what concerns the characterisation of competitive cooperation (or social coordination) by the results of empirical findings. These experimental tasks stress the quite unmistakable competitive attitude that arise in the behaviour of chimpanzees when put under specific circumstances. This evidence, the results of Hare *et al.* (2000, 2001, 2004), have been referred to as the, so-called, Competitive Cognition Hypothesis, which suggests that chimpanzees have been demonstrated to be more skilled and motivated when engaged in competitive rather than in (collaborative) cooperative, cognitive tasks. Relatively, instead, to the notion of collaborative cooperation (or collective intentionality), Carpenter *et al.* (2005) have shown that even very young children (between the age of 1 and 2 years) are capable of grasping the role structure of joint actions based – as previously explained - on joint intentions. Those children demonstrate their ability to imitate role reversal by spontaneously acting out the other role when appropriate. This means that human children pursue shared "we-intentions" with others, as they develop an ability to engage in collaborative

ANGELICA KAUFMANN *University of Antwerp*

cooperation as the basic form of collective intentionality, before language kicks in. And even though, chimpanzees" communication can be very sophisticated, it will always remain at the level of individualistic or I-intentionality, lacking the structure of collective or we-intentionality that is characterised by the joint attentional frames that typifies human children communication, normally, from the age of two years old. In fact, in human ontogeny, we observe how children's communicative experiences occur in a very complex social and pragmatic context. We can take as a valuable example a developmental phenomenon named "triadic engagement" (Tomasello *et al.* 2005) that children begin to experience at around the age of 9 and 12 months. This is the social context in which the child becomes able to coordinate an interaction that comprehends objects and people simultaneously. The triadic engagement consists in a triangulation of references by means of symbolisation. In other words, a child learns how to direct the attention of someone else to a given object, eparing the ground for joint attentions. Joint attentions are possible when there is a mutual awareness towards the nature of the object or the event that is the subject of the attention.

Tomasello (2003) argues that the primary role of symbolic communication is that of enabling an individual to manipulate the attention of, or to share the attention with, another individual. More specifically, he claims, symbolic communication occurs in its complete form when linguistic communication becomes referential. This referentiality is what enables the other to share attention to some virtually construed entity, that is a symbolic reference that stands for a given entity.

This kind of interaction does not occur in non-human primates in that their communicative signals are not used to direct the attention of others through the conveying of information by means of referentiality. Signal references are, rather, used to affect the behaviour of others directly.

This, in all likelihood means that the evolution of human language itself originally arose to satisfy the necessity to influence the behaviour of others, and only later in phylogeny, to influence their mental states.

So language is a social entity itself and, therefore, its evolution is driven by the needs of its users. Language can satisfy humans" greatest need, namely that of exploiting a system of heredity linking the generations, and that is capable of keeping up with continuous cultural changes. This means that if we accept that cultural progress is one of the main distant goals and symbolic referential thought is necessary in order to engage in long-term goals, therefore we can understand why cultural progress is made possible by our capability for symbolisation in linguistics. So if the function of

communication in non-human primates is, as Tomasello argues, that of influencing other's behaviour, the function of human communication is also that of influencing other's mental states. Because symbolic communication is a tool that enables the access to the contents of other's mental states. And as Deacon (1997) said, the most effective means for coordinating behaviour, that is being able to anticipate another's mental responses in the context of joint activities, requires imagination and this is a uniquely powerful tool for social manipulation. The crucial function of a symbolic-based communicative system is the ability to mentally represent the contents of other minds. Deacon explains very clearly what is the role of symbolisation in his notion of a shared "virtual mind": "The ability to use virtual reference to build up elaborate internal models of possible futures, and to hold these complex visions in mind with the force of the mnemonic glue of symbolic inference and descriptive shorthands, gives us unprecedented capacity to generate independent adaptive behaviour" (Deacon 1997, 427).
It is now time to call back Searle's characterisation of his notion of collective intentionality and then see to what extent it does not match previous discussions.

4. Six Conditions of (In)Adequacy

Following Searle (1995, 152) collective intentionality consists in (I) engaging in cooperative behaviour, (II) sharing intentional states (e.g., beliefs, desires, intentions), or – as he rephrases it in his 2010's analysis (Searle 2010, 43) - (I.a) having collective intentions in cooperative planning (what he calls collective prior intentions) and acting (what he calls collective intentions-in-action), and (II.a) holding collective intentions in believing and desiring. In order to explain this, Searle (2010, 44-45) has outlined six conditions of adequacy that, he believes, any account of collective intentionality has to meet. Within these six conditions, recalled as follows, I shall focus on the third and the sixth conditions, in that they both clearly appear to be counterintuitive relative to Searle's idea that collective intentionality is not human-unique:

1. We must have a clear distinction between prior intentions and intentions-in-action.
2. The conditions of satisfaction of both prior intentions and intentions-in-action are causally self-referential.
3. All intentionality, whether collective or individual, has to exist inside individuals" heads.
4. In case of collective intentionality, we have to distinguish what I can individually cause, that which can be part of the condition

> of satisfaction of my intentional content, and that which I take for granted as contributed by my collaborators in the collective intentionality.
> 5. The propositional content can only represent the condition of satisfaction of the intention.
> 6. In collective intentionality, it cannot be required of each individual's intentionality that he knows what the intentionality on the part of others is. [...] All one needs to believe is that they share one's collective goal and intend to do their part in achieving the goal.

Having in mind Rakoczy and Tomasello (2007)'s (enhanced) explanation of the reason why is necessary to appreciate the distinction between social coordination and collective intentionality, enables us to understand why claims such as those made in the third condition, and in the sixth condition, cannot apply to collective intentionality if we ought to embrace Searle's position. In fact, to say that collective intentionality has to exist inside individuals" heads implies assuming the mastery of rather complex means[7]. In terms of cognitive and communicative demands, it implies the ability to grasp the mental states of others, and the contents of those mental states, which, as previously stated, are made of propositional attitudes that are articulated through a symbolic-based system of reference, namely that of language. This does not mean that, necessarily, without language there is no collective intentionality, but it means that, necessarily, without those pre-linguistic social activities, such as role reversal imitation, that can be observed since very early in human ontogeny (Tomasello and Call 1999, Tomasello 2003), and that constitutes the normal route to the acquisition of a linguistic communicative modality, there is no collective intentionality. The advantage of embracing an enactive view in order to investigate the development of socio-cognitive abilities is that it offers an explanation on how the interaction between the agent and its environment (which is made of other agents as well) enables the growth of the cognitive and communicative skills that we exploit in social cognition. These skills are, as I have argued, what make collective intentionality an exclusively human business. They are not innate tools, still there is some peculiar reason for why humans only can develop them. This is why the mark of human cognition might be found in this double mechanism: the first is the capacity for sophisticated abstract thought and planning, and the second is the capacity to exploit this abilities as social interactive weapons.

7 See section 2.

5. Conclusion

Searle's notion of collective intentionality is inconsistently presented. On the one hand, it is claimed to be shared by human and non-human animals, and on the other hand is argued to be characterised by behaviours that are only permitted by certain human-unique features. As it has been explained this notion is an overattribution, for two main reasons: firstly, it emphasises its primitiveness[8], and secondly, it neglects the cognitive and communicative demands of cooperation that the single participants have to deal with. It is also incompatible to his six conditions of adequacy. This is because, as I have explained, the conditions that he outlines (in particular the third and the sixth) cannot apply for an account that puts collective intentionality and social coordination, under the same explanatory label. In order to appreciate the species-uniqueness that characterises human social ontology we should reject Searle's notion and this is made possible through a reinforced version of Tomasello and Rakoczy's (2007) criticism that takes into account the distinction between competitive and collaborative cooperation (Brinck and Gärdenfors 2001), and the respective cognitive and communicative demands that these two kinds of social behaviour require. In addition the enactivist paradigm offers a consistent explanatory framework that enables to reinforce the critics to Searle's argument.
In Summary, collective intentionality is grounded in the ontogenetic roots of human social ontology (Rakoczy 2008). It is embedded in cooperative behaviour described in terms of collaborative cooperation that requires communicative modalities (that will become linguistic) that enables social learning. So far, there is no other species that share this ontogenetic path with us, therefore we cannot accept Searle's notion of collective intentionality, which as he puts it, would, indeed, best be just named, social coordination.

8 More on the critique on the primitiveness of collective intentionality in Tomasello and Rakoczy (2007).

REFERENCES

Bermùdez, J.L. (2003), "Mindreading in the Animal Kingdom", *The Philosophy of Animal Minds*, (Ed.) R. Lurz, Cambridge University Press, Cambridge (UK), 2003, pp. 145-164;
Bratman, M. (1987), *Intentions, Plans and Practical Reason*, Harvard University Press, Cambridge (Mass.), 1987;
Brinck, I. and Gärdenfors, P. (2001), *Co-operation and Communication in Apes and Humans*, Lund University Cognitive Studies, 2001;
Davidson, D. (1984), *Inquiries into Truth and Interpretation*, Clarendon, Oxford, 1984;
Deacon, T. (1997), *The Symbolic Species*, The Penguin Press, 1997;
Gärdenfors, P. (1996), "Cued and Detached Representations in Animal Cognition", *Behavioural Processes*, 35, 1996, pp. 263-273;
Hare, B., Call, J., Agnetta, B., and Tomasello, M. (2000), "Chimpanzees Know What Conspecifics do and do not See", *Animal Behaviour*, 59 (4), 2000, pp. 771-785;
Hare, B., Call, J., and Tomasello, M. (2001), "Do Chimpanzees Know What Conspecifics Know?", Animal Behaviour, 61, 2001, pp. 139-141;
Hare, B. (2001), "Can Comparative Paradigms Increase the Validity of Experiments on Primate Social Cognition?", *Animal Cognition*, 4, 2001, pp. 269-280;
Hare, B. and Tomasello, M. (2004), "Chimpanzees are More Skillful in Competitive than in Cooperative Cognitive Tasks", *Animal Behaviour*, 68, 2004, pp. 571-581;
Hutto, D.D. (2008), *Narrative Folks Psychology*, The MIT Press. Cambridge (Mass.), 2008;
Hutto, D.D. (2009), "Mental Representation and Consciousness", (Ed.) William P. Banks, *Encyclopedia of Consciousness*, vol 2, 2009, pp. 19-32;
Pacherie, E. (2003), "Is Collective Intentionality Really Primitive?", *American Journal of Economics and Sociology*, 62 (1), 2003;
Rakoczy, H. (2006), "Pretend Play and the Development of Collective Intentionality", *Cognitive Systems Research*, 7, 2006 pp. 113-127;
Rakoczy, H. (2008), "Collective Intentionality and Uniquely Human Cognition", in E. Neumann-Held and L. Röska-Hardy (Eds.), *Learning from Animals? Examining the Nature of Human Uniqueness*, Psychology Press, London, 2008, pp. 105-121;
Searle, J.R. (1979), "What is an Intentional State?", *Mind*, 88, 1979, pp. 74-92;
Searle, J.R. (1983), *Intentionality: An Essay in the Philosophy of Mind*, Cambridge University Press, Cambridge (UK), 1983;
Searle, J.R. (1995), *The Construction of Social Reality*, The Free Press, New York, 1995;
Searle, J.R. (2010), *Making the Social World*, Oxford University Press, New York, 2010;
Seemann, A. (Ed.) (2012), *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*, The MIT Press, 2012;

Sterelny, K. (2003), *Thought in a Hostile World: The Evolution of Human Cognition*, Blackwell Publishing, Oxford (UK), 2003;
Tomasello, M. and Call. (1997), *Primate Cognition*, Oxford University Press, Oxford, 1997;
Tomasello, M. (2003), "On the Different Origins of Symbols and Grammar", (Eds.) M. H. Christiansen and S. Kirby, *Language Evolution*, Oxford University Press, Cambridge (Mass.), 2003, pp. 94-110;
Tomasello, M., Carpenter, M., Call, J., Behne, T., and Moll, H. (2005), "Understanding and Sharing Intentions: The Origins of Cultural Cognition", *Behavioural and Brain Sciences*, 28, 2005, pp. 675-735;
Tomasello, M. and Rakoczy, H. (2007), "The Ontogeny of Social Ontology", in Tsohatzidis, Savas L. (Ed.), *Intentional Acts and Institutional Facts: Essays on John Searle's Social Ontology*, 2007;
Wyman, E. and Tomasello, M. (2007), "The Ontogenetic Origins of Cooperation", in Dunbar, R. and Barrett, L. (Eds.), *The Oxford Handbook of Evolutionary Psychology*, Oxford University Press, New York, 2007.